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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,574	09/05/2003	Daniel John Smith	1171/41365/Case 135	7897

279 7590 09/28/2006

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CHICAGO, IL 60603

EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/656,574	Applicant(s) SMITH ET AL.	
	Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006 and 29 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-27 is/are pending in the application.
- 4a) Of the above claim(s) 14-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-29-06</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by German Patent 19848172 for the same reasons as expressed in paragraph 4 of the Office action dated 3-20-06.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 19848172 in view of Carlson (US '061) and Hytrel ® thermoplastic polyester elastomer (from duPont 2000) for the same reasons as expressed in paragraph 6 of the Office action dated 3-20-06.
5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 4 further taken with Nash et al for the same reasons as expressed in paragraph 7 of the Office action dated 3-20-06.
6. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nash et al in view of Wade for the same reasons as expressed in paragraph 8 of the Office action dated 3-20-06.
7. Claims 10-13 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 5 further taken with

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Wade for the same reasons as expressed in paragraph 9 of the Office action dated 3-20-06.

***Election/Restrictions***

8. Claims 14-24 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1-11-06.

***Response to Arguments***

9. Applicant's arguments filed 8-21-06 have been fully considered but they are not persuasive.

The applicant initially notes that the complete translation of German Patent '172 relates the invention therein to a method of encapsulating or embedding a solid reinforcing element (particularly a wire) into a joint between overlapping layers of spirally wound conduit and that the resulting conduits lateral reinforcement against crushing is provided by the metal wire while the molten plastic filler material embeds the wire into the joint preventing it from coming loose when subjected to mechanical stresses. The applicant argues that as such, the plastic "filler material" fills the voids created as the overlapping layer is supported away from the under lapping layer by its own stiffness and that in order to prevent the molten plastic filler from escaping out the longitudinal edge sections of the conduit must be pressed by rollers 19, 20. While it is agreed that such pressing with rollers is suggested by the reference to German Patent '172, the claims as presented do not exclude such a pressing operation. Additionally the

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claims do not recite the exclusion of a metal reinforcing wire in the region of the overlap and do not recite that the thin ribbon was sufficiently supple (at least laterally) to conform along its overlapping portions to the contour of the bead. As presented the claim recites that "said overlapping portions conform to the contour of the bead so that said overlapping edge meets or substantially meets said under lapping ribbon at an edge of said bead". The use of the pressing rollers 19, 20 press the wound strip such that it follows the contour of the extruded bead material and such that the overlapping edge meets the under lapping edge in the manner claimed. Applicant argues that without the presence of the reinforcing wire the molten filler material would be flattened by the pressure of the overlapping layer, however: (1) this is mere speculation on applicant's part, and; (2) the claims do not exclude the wire as claimed and thus are not commensurate in scope with the arguments presented.

The applicant again states that the disclosure of German Patent '172 does not teach a material which is sufficiently supple to conform to the contour of the bead, however the claims have been amended to remove this language therefrom and thus the claims are not commensurate in scope with the applicant's arguments. The applicant is advised that the reference taught the pressing such that the assembly followed the contour of the filler bead therein. The applicant notes that a person skilled in the relevant art at the priority date of the present application would not have known to use sufficiently supple materials despite the teachings of Carlson and DuPont's Hytrel Thermoplastic Polyester Elastomer. The applicant is advised that one desiring to make a breathing tube would have understood that the wire of German Patent '172 would

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have been electrically conductive and that the material which made up the tubing would have been a porous material like Hytrel which was expressly referred to as useful in Carlson. Certainly, the winding techniques taught therein would have been applicable to formation of a breathing tube and one skilled in the art would have understood such was desirable in the art.

Regarding claim 7 and the presence of a sacrificial layer, the applicant argues that in Nash the claims require that the sacrificial layer be applied to the former while in Nash the only layer applied directly to the former as the claims require is a cardboard layer. The applicant is advised that in Nash, the former extended all the way through the device and that there is no exclusion of the cardboard layer which was initially applied to the former. Clearly, the cellophane layer was applied to the former in Nash and one skilled in the art reading the reference would have understood that the same was purely sacrificial in nature as it was removed subsequent to processing. Note that the claims do not recite that the sacrificial layer was of thin plastic was applied directly upon the former (wherein one excluded the cardboard layer there between). As such, the claims are not commensurate in scope with the applicant's arguments. Regarding the welding of the overlapped layers, the reference to Wade suggested that the cellophane material would have melted in the processing and would have been therefore welded in the curing of the tube therein when heat was applied thereto. It is agreed that Nash et al does not expressly state that the sacrificial layers were welded to each other, however such would have been obvious in light of the teachings of Nash and Wade. Regarding the rotation and advancing of the tube on the former, the applicant is advised that the

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reference to German Patent '172 clearly rotated and advance the material on the mandrel. Advancing the core material formed on the mandrel by rotation of the mandrel or rotation of the material on a stationary mandrel was well within the skill level of the ordinary artisan and such were art recognized alternatives in the art at the time the invention was made. One skilled in the art would have been expected to provide such relative movement between components and such is taken as conventional in the art.

Regarding the applicant's arguments relating to the cellophane, it should be noted that the reference to Wade appears to suggest that one skilled in the art would have understood that the cellophane materials employed by Nash would have been melted. Additionally as previously noted, the reason for the cardboard in Nash appears to be to prevent sticking of the cellophane on the former therein. As such, one skilled in the art would have understood that the cellophane material was in fact heat sealable. Additionally, the claims recite a plastic material and do not exclude a cellophane material with a coating thereon in order to render the same heat sealable. Additionally, while the reference to Wade states that cellulose acetate is heat sealable and not cellophane, one skilled in the art would have understood that cellophane baking materials for cellophane tapes were usually formed from cellulose acetate a synthetic derivative of cellulose, which comes from wood pulp or cotton seeds. As such, there is ample evidence that one skilled in the art would have understood that the cellophane layer in Nash was in fact heat sealable and weldable and would have been joined together during processing.

No claims are allowed.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1733

JHA  
September 25, 2006